

10/595,035

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1712KLP

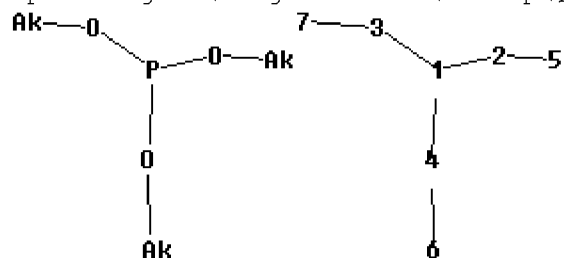
PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

FILE 'HOME' ENTERED AT 19:38:35 ON 07 DEC 2008

=> file registry

Uploading C:\Program Files\Stnexp\Queries\035\035a.str



chain nodes :

1 2 3 4 5 6 7

chain bonds :

1-2 1-3 1-4 2-5 3-7 4-6

exact/norm bonds :

1-2 1-3 1-4 2-5 3-7 4-6

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS

L1 STRUCTURE UPLOADED

=> s L1 sss full

FULL SEARCH INITIATED 19:39:04 FILE 'REGISTRY'

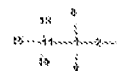
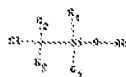
FULL SCREEN SEARCH COMPLETED - 638449 TO ITERATE

100.0% PROCESSED 638449 ITERATIONS (2 INCOMPLETE) 40861 ANSWERS
SEARCH TIME: 00.00.09

L2 40861 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\035\035b.str



```
chain nodes :
1  2  3  4  5  8  9  11  13  14  15
chain bonds :
1-2  1-8  1-9  1-11  2-3  4-5  11-13  11-14  11-15
exact/norm bonds :
1-8  1-9  2-3  4-5  11-13  11-14
exact bonds :
1-2  1-11  11-15
```

G1: Ak, [*1]

G2: H, Ak

```
Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  5:CLASS  8:CLASS  9:CLASS  11:CLASS  13:CLASS
14:CLASS  15:CLASS
```

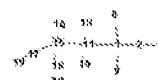
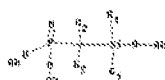
L3 STRUCTURE UPLOADED

```
=> s L3 sss full
FULL SEARCH INITIATED 19:39:38 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 27535 TO ITERATE
```

```
100.0% PROCESSED 27535 ITERATIONS 423 ANSWERS
SEARCH TIME: 00.00.01
```

L4 423 SEA SSS FUL L3

```
=>
Uploading C:\Program Files\Stnexp\Queries\035\035c.str
```



chain nodes :

1 2 3 4 5 8 9 11 13 14 15 16 17 18 19 20
chain bonds :
1-2 1-8 1-9 1-11 2-3 4-5 11-13 11-14 11-15 15-16 15-17 15-18 17-19 18-
20

exact/norm bonds :
1-8 1-9 2-3 4-5 11-13 11-14 15-16 15-17 15-18 17-19 18-20
exact bonds :
1-2 1-11 11-15

G1: Ak, [*1]

G2: H, Ak

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 8:CLASS 9:CLASS 11:CLASS 13:CLASS
14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS

L5 STRUCTURE UPLOADED

=> s L5 sss full
FULL SEARCH INITIATED 19:40:11 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4472 TO ITERATE

100.0% PROCESSED 4472 ITERATIONS 24 ANSWERS
SEARCH TIME: 00.00.01

L6 24 SEA SSS FUL L5

=> file caplus
=> d his

(FILE 'HOME' ENTERED AT 19:38:35 ON 07 DEC 2008)

FILE 'REGISTRY' ENTERED AT 19:38:44 ON 07 DEC 2008

L1 STRUCTURE UPLOADED
L2 40861 S L1 SSS FULL
L3 STRUCTURE UPLOADED
L4 423 S L3 SSS FULL
L5 STRUCTURE UPLOADED
L6 24 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:40:22 ON 07 DEC 2008

=> s L2
L7 62589 L2

=> s L4
L8 613 L4

=> s L6
L9 26 L6

=> d his

(FILE 'HOME' ENTERED AT 19:38:35 ON 07 DEC 2008)

FILE 'REGISTRY' ENTERED AT 19:38:44 ON 07 DEC 2008

L1 STRUCTURE UPLOADED
L2 40861 S L1 SSS FULL
L3 STRUCTURE UPLOADED
L4 423 S L3 SSS FULL
L5 STRUCTURE UPLOADED
L6 24 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:40:22 ON 07 DEC 2008

L7 62589 S L2
L8 613 S L4
L9 26 S L6

=> s L7 (L) L8
L10 0 L7 (L) L8

=> s L7 and L8
L11 16 L7 AND L8

=> s L11 and L9
L12 6 L11 AND L9

=> d L12 1-6 ibib so abs hitstr

L12 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:273682 CAPLUS Full-text
DOCUMENT NUMBER: 144:333109
TITLE: Hydrophobic treatment of substrates with
phosphonate-modified polysiloxanes
INVENTOR(S): Sandmeyer, Frank; Bockholt, Andreas; Gollwitzer,
Leonhard
PATENT ASSIGNEE(S): Wacker Chemie A.-G., Germany
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 102005046704	A1	20060323	DE 2005-102005046704	20050929
PRIORITY APPLN. INFO.:			DE 2005-102005046704	20050929

SO Ger. Offen., 9 pp.
CODEN: GWXXBX

AB Phosphonate-modified polysiloxanes prepared by reacting phosphonate-group-containing silanes alone or with alkoxysilanes and water are useful as hydrophobizing agents for cements and concrete. Thus, diethylphosphonomethyltrimethoxysilane-methyl(dimethoxy)(aminopropylaminoethyl)silane copolymer prepared by cohydrolysis of the two monomers was used coating (brushing) onto cement fibers with d. 200 g/m2 providing the surfaces with water-repellent properties.

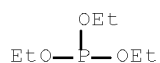
IT 122-52-1, Triethylphosphite 5926-26-1,
Chloromethyltrimethoxysilane

RL: RCT (Reactant); RACT (Reactant or reagent)
(phosphonate-modified polysiloxane precursor; phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes alone or with alkoxysilanes and water used as hydrophobizing agents for

cements and concrete)

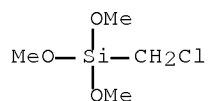
RN 122-52-1 CAPLUS

CN Phosphorous acid, triethyl ester (CA INDEX NAME)



RN 5926-26-1 CAPLUS

CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



IT 880128-19-8P 880128-21-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(phosphonate-modified polysiloxanes prepared by reacting of
phosphonate-group-containing silanes alone or with alkoxysilanes and water
used as hydrophobizing agents for cements and concrete)

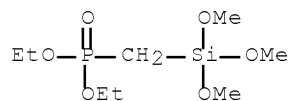
RN 880128-19-8 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with
trimethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

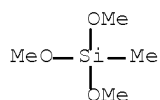
CMF C8 H21 O6 P Si



CM 2

CRN 1185-55-3

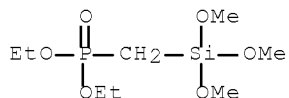
CMF C4 H12 O3 Si



RN 880128-21-2 CAPLUS
CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with trimethoxysilane (9CI) (CA INDEX NAME)

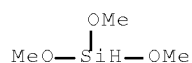
CM 1

CRN 827615-75-8
CMF C8 H21 O6 P Si



CM 2

CRN 2487-90-3
CMF C3 H10 O3 Si

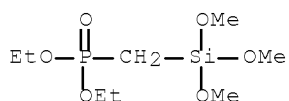


IT 880128-20-1F
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes alone or with alkoxysilanes and water used as hydrophobizing agents for cements and concrete)

RN 880128-20-1 CAPLUS
CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with N-[2-(dimethoxymethylsilyl)ethyl]-1,3-propanediamine (9CI) (CA INDEX NAME)

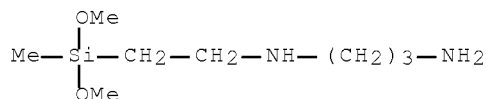
CM 1

CRN 827615-75-8
CMF C8 H21 O6 P Si



CM 2

CRN 160888-91-5
CMF C8 H22 N2 O2 Si



L12 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:117915 CAPLUS Full-text
DOCUMENT NUMBER: 144:192378
TITLE: Method for producing phosphate silanes
INVENTOR(S): Bockholt, Andreas; Brader, Leonhard
PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie G.m.b.H.,
Germany
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006012952	A1	20060209	WO 2005-EP6816	20050623
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
DE 102004036722	A1	20060323	DE 2004-102004036722	20040729
EP 1773852	A1	20070418	EP 2005-755297	20050623
R:	BE, DE, FR, GB, NL			
CN 1993372	A	20070704	CN 2005-80025683	20050623
JP 2008508197	T	20080321	JP 2007-522935	20050623
US 20080045735	A1	20080221	US 2007-572536	20070123
KR 2007029261	A	20070313	KR 2007-701848	20070125
KR 823436	B1	20080417		
PRIORITY APPLN. INFO.:			DE 2004-102004036722A	20040729
			WO 2005-EP6816	W 20050623

OTHER SOURCE(S): CASREACT 144:192378; MARPAT 144:192378

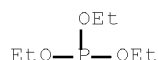
SO PCT Int. Appl., 15 pp.

CODEN: PIXXD2

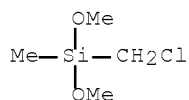
AB The invention relates to a method for producing phosphonate silanes, $\text{Rln(X)3-nSiR3-PO(OR4)(OR5)}$, consisting in converting a halogen- containing silane,

$R_1n(X)3-nSiR_3Hal$, with phosphites, $P(OR_4)(OR_5)(OR_6)$ (R_1 = optionally halogen-substituted hydrocarbon radical with 1-20 carbon atoms and also represents hydrogen; X = hydrolyzable group or OH; R_3 = possibly halogen-substituted alkyl rest with 1-10 carbon atoms; R_4 , R_5 , and R_6 = possibly halogen-substituted hydrocarbon radical with 1-20 carbon atoms; Hal = halogen atom; n = 0-3). During the reaction, a part of reaction mixture is continuously or repeatedly withdrawn and is returned to the rest of the reaction mixture after the already formed product is removed therefrom. Thus, reaction of chloromethyldimethoxymethylsilane with $P(OEt)_3$ at 100° for 2h at 350 mbar gave title diethylphosphonatomethyldimethoxymethylsilane.

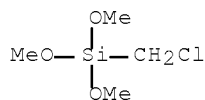
IT 122-52-1, Triethyl phosphite 2212-11-5,
 (Chloromethyl)dimethoxymethylsilane 5926-26-1,
 (Chloromethyl)trimethoxysilane 18143-33-4,
 (Chloromethyl)methoxydimethylsilane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (method for preparation of phosphonate silanes via high pressure reaction of phosphites with halo containing silane)
 RN 122-52-1 CAPLUS
 CN Phosphorous acid, triethyl ester (CA INDEX NAME)



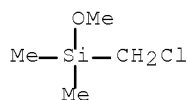
RN 2212-11-5 CAPLUS
 CN Silane, (chloromethyl)dimethoxymethyl- (CA INDEX NAME)



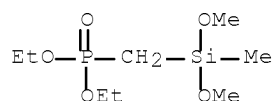
RN 5926-26-1 CAPLUS
 CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



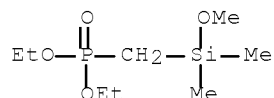
RN 18143-33-4 CAPLUS
 CN Silane, (chloromethyl)methoxydimethyl- (CA INDEX NAME)



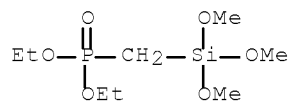
IT 827615-73-6P 827615-74-7P 827615-75-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (method for preparation of phosphonate silanes via high pressure reaction of phosphites with halo containing silane)
 RN 827615-73-6 CAPLUS
 CN Phosphonic acid, P-[(dimethoxymethylsilyl)methyl]-, diethyl ester (CA INDEX NAME)



RN 827615-74-7 CAPLUS
 CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester (9CI) (CA INDEX NAME)



RN 827615-75-8 CAPLUS
 CN Phosphonic acid, P-[(trimethoxysilyl)methyl]-, diethyl ester (CA INDEX NAME)

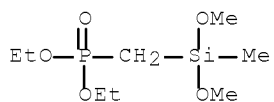


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:451447 CAPLUS Full-text
 DOCUMENT NUMBER: 142:482806
 TITLE: Production of organosiloxanes modified by phosphonate ester groups

INVENTOR(S): Schaefer, Oliver; Luckas, Hans-Joachim
 PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie G.m.b.H.,
 Germany
 SOURCE: PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

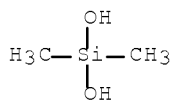
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005047368	A1	20050526	WO 2004-EP12201	20041028
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10351803	A1	20050609	DE 2003-10351803	20031106
EP 1678240	A1	20060712	EP 2004-790971	20041028
R: BE, DE, FR, GB, NL				
CN 1875053	A	20061206	CN 2004-80032721	20041028
JP 2007512395	T	20070517	JP 2006-538708	20041028
US 20070167597	A1	20070719	US 2006-595701	20060505
PRIORITY APPLN. INFO.:			DE 2003-10351803	A 20031106
			WO 2004-EP12201	W 20041028
SO	PCT Int. Appl., 25 pp. CODEN: PIXXD2			
AB	The title polymers, which can be prepared readily using com. available compds., are prepared by the reaction of phosphonate esters bearing silyl groups with siloxanes. Adding 0.3 mol (chloromethyl)dimethoxymethylsilane over 3 h to 0.6 mol P(OEt) ₃ at 140° with strong stirring, heating at 170° for 30 min, and distilling excess P(OEt) ₃ in vacuo gave 58.6 g di-Et [(dimethoxymethylsilyl)methyl]phosphonite (I). Adding 220 g polydimethylsiloxane diol (mol. weight 1100) over 10 min to 26.1 g I and 0.5% iso-Pr phosphate (catalyst) at 60° with strong stirring and heating at 80° for 2 h gave 239 g phosphonate group-containing block copolymer with number- average mol. weight 2500.			
IT	852213-16-2P 852213-17-3P 852213-18-4P RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (actual and assumed monomers; production of organosiloxanes modified by phosphonate ester groups)			
RN	852213-16-2 CAPLUS			
CN	Phosphonic acid, [(dimethoxymethylsilyl)methyl]-, diethyl ester, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)			
CM	1			
CRN	827615-73-6			
CMF	C8 H21 O5 P Si			



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



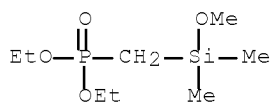
RN 852213-17-3 CAPLUS

CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)

CM 1

CRN 827615-74-7

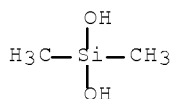
CMF C8 H21 O4 P Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



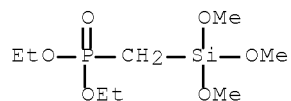
RN 852213-18-4 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

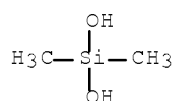
CMF C8 H21 O6 P Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si

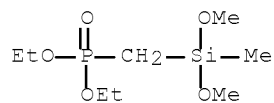


IT 827615-73-6P 827615-74-7P 827615-75-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation)

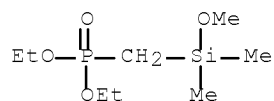
RN 827615-73-6 CAPLUS

CN Phosphonic acid, P-[(dimethoxymethylsilyl)methyl]-, diethyl ester (CA
INDEX NAME)

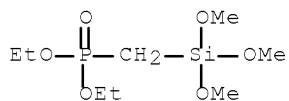


RN 827615-74-7 CAPLUS

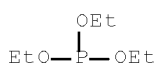
CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester (9CI) (CA
INDEX NAME)



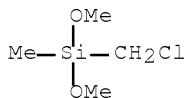
RN 827615-75-8 CAPLUS
 CN Phosphonic acid, P-[(trimethoxysilyl)methyl]-, diethyl ester (CA INDEX NAME)



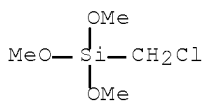
IT 122-52-1, Triethyl phosphite 2212-11-5,
 (Chloromethyl)dimethoxymethylsilane 5926-26-1,
 (Chloromethyl)trimethoxysilane 18143-33-4,
 (Chloromethyl)methoxydimethylsilane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of tri-Et phosphite with (chloromethyl)silanes)
 RN 122-52-1 CAPLUS
 CN Phosphorous acid, triethyl ester (CA INDEX NAME)



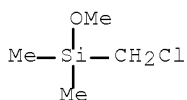
RN 2212-11-5 CAPLUS
 CN Silane, (chloromethyl)dimethoxymethyl- (CA INDEX NAME)



RN 5926-26-1 CAPLUS
 CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



RN 18143-33-4 CAPLUS
 CN Silane, (chloromethyl)methoxydimethyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:58269 CAPLUS Full-text

DOCUMENT NUMBER: 142:156528

TITLE: Method for producing phosphonate-modified silicones.

INVENTOR(S): Schaefer, Oliver; Luckas, Hans-Joachim; Rachl, Sandra

PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie GmbH, Germany

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005005519	A1	20050120	WO 2004-EP7173	20040701
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10331288	A1	20050217	DE 2003-10331288	20030710
EP 1644430	A1	20060412	EP 2004-740538	20040701
EP 1644430	B1	20080827		
R: BE, DE, FR, GB, IT				
CN 1823117	A	20060823	CN 2004-80019805	20040701
US 20070049718	A1	20070301	US 2006-595035	20060109
PRIORITY APPLN. INFO.:			DE 2003-10331288	A 20030710
			WO 2004-EP7173	W 20040701

SO PCT Int. Appl., 23 pp.

CODEN: PIXXD2

AB Phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes alone or with alkoxy silanes and water are useful as additives (especially as antistatic additives) in elastomeres (especially in siloxane elastomers). Thus, a polymer prepared by hydrolytic polymerization of a mixture 12 g of dimethyldimethoxysilane and 25.6 g of di-Et ester of [(dimethoxymethylsilyl)methyl]phosphonic acid with 14.5 g of water and 3 weight% of HCl at 80° and 100 mbar (44 weight% of a cyclic part having mol. weight 650 and 56 weight% of a linear part having mol. weight 6,200) is useful as an antistatic additive in a mixture with a moisture-crosslinkable silicone (Elastosil).

IT 122-52-1, Triethylphosphite 2212-11-5,

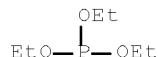
Chloromethyldimethoxymethylsilane 5926-26-1,
Chloromethyltrimethoxysilane 15267-95-5,
Chloromethyltriethoxysilane 18143-33-4,
Chloromethyldimethylmethoxysilane

RL: RCT (Reactant); RACT (Reactant or reagent)

(phosphonate-group-containing silane precursor; phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes with alkoxysilanes useful as antistatic additives in elastomeres (especially in siloxane elastomers))

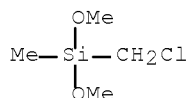
RN 122-52-1 CAPLUS

CN Phosphorous acid, triethyl ester (CA INDEX NAME)



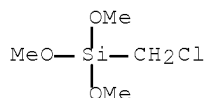
RN 2212-11-5 CAPLUS

CN Silane, (chloromethyl)dimethoxymethyl- (CA INDEX NAME)



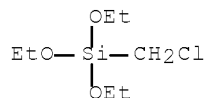
RN 5926-26-1 CAPLUS

CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



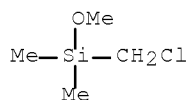
RN 15267-95-5 CAPLUS

CN Silane, (chloromethyl)triethoxy- (CA INDEX NAME)

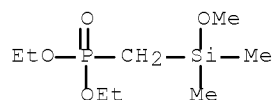


RN 18143-33-4 CAPLUS

CN Silane, (chloromethyl)methoxydimethyl- (CA INDEX NAME)



IT 827615-74-7DP, reaction products with DimethylSilanediol and
alkoxysilanes 827615-76-9P 827622-42-4F
RL: IMF (Industrial manufacture); PREP (Preparation)
(phosphonate-modified polysiloxanes prepared by reacting of
phosphonate-group-containing silanes with alkoxysilanes useful as
antistatic additives in elastomeres (especially in siloxane elastomers))
RN 827615-74-7 CAPLUS
CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester (9CI) (CA
INDEX NAME)

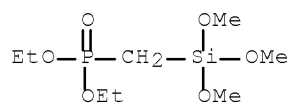


RN 827615-76-9 CAPLUS
CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with
dimethoxydimethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

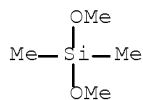
CMF C8 H21 O6 P Si



CM 2

CRN 1112-39-6

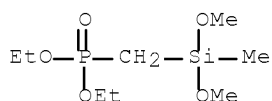
CMF C4 H12 O2 Si



RN 827622-42-4 CAPLUS
 CN Phosphonic acid, [(dimethoxymethylsilyl)methyl]-, diethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

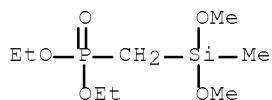
CRN 827615-73-6
 CMF C8 H21 O5 P Si



IT 827622-45-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes with alkoxy silanes useful as antistatic additives in elastomeres (especially in siloxane elastomers))
 RN 827622-45-7 CAPLUS
 CN Phosphonic acid, [(dimethoxymethylsilyl)methyl]-, diethyl ester, polymer with dimethoxydimethylsilane (9CI) (CA INDEX NAME)

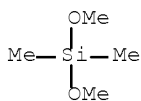
CM 1

CRN 827615-73-6
 CMF C8 H21 O5 P Si



CM 2

CRN 1112-39-6
 CMF C4 H12 O2 Si



L12 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:58216 CAPLUS Full-text

DOCUMENT NUMBER: 142:156464

TITLE: Production of hydrolyzable phosphorus-containing
alkoxysilanesINVENTOR(S): Schaefer, Oliver; Bauer, Andreas; Kriegbaum, Markus;
Rachl, SandraPATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie GmbH,
Germany

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005005440	A2	20050120	WO 2004-EP7174	20040701
WO 2005005440	A3	20050421		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10331289	A1	20050217	DE 2003-10331289	20030710
EP 1644383	A2	20060412	EP 2004-740539	20040701
R: DE, FR, GB				
US 20060247409	A1	20061102	US 2006-595036	20060612
PRIORITY APPLN. INFO.:			DE 2003-10331289	A 20030710
			WO 2004-EP7174	W 20040701

OTHER SOURCE(S): MARPAT 142:156464

SO PCT Int. Appl., 13 pp.

CODEN: PIXXD2

AB The invention relates to phosphorus-modified silanes containing at least one methoxy group and having the general formula $R_5P(O)-CR_4_2-Si(R_1)_a(R_2)_3-a$, where R_1 groups are independently substituted or unsubstituted alkyl, alkenyl, cycloalkyl or aryl groups containing 1-18 carbon atoms, or alkoxy groups containing 2-18 carbon atoms; R_2 is methoxy group; R_4 groups are independently hydrogen, or alkyl, cycloalkyl or aryl groups containing 1-18 carbon atoms unsubstituted or substituted with fluoro, chloro, alkoxy, amine, cyanate or isocyanate groups; R_5 groups are independently substituted or unsubstituted alkoxy or aryloxy groups containing 1-18 carbon atoms, or substituted or unsubstituted polyoxyalkylene containing 1-4000 carbon atoms; and a is an integer from 0 to 2; R_1 , R_4 , or R_5 together can be a part of a cyclic compound. The phosphorus-modified silanes are produced by reacting haloalkylsilanes with phosphites. The phosphorus-modified silanes can be used as components of antifreeze and coating compns., or for production of functionalized resins by cohydrolysis with alkoxysilanes. Thus, a phosphorus-modified silane of the formula $EtO_2P(O)-CH_2-Si(Me)(OMe)_2$ was produced in 76% yield by adding slowly over 3 h under nitrogen chloromethyldimethoxymethylsilane (46.4 g, 0.3 mol) to

tri-Et phosphite (99.7 g, 0.6 mol) heated to 140°, reacting the mixture at 170° for 30 min, and removing tri-Et phosphite excess under vacuum.

IT 827615-76-9P

RL: IMF (Industrial manufacture); PREP (Preparation)
(production of hydrolyzable phosphorus-containing alkoxysilanes)

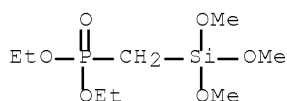
RN 827615-76-9 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with dimethoxydimethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

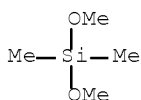
CMF C8 H21 O6 P Si



CM 2

CRN 1112-39-6

CMF C4 H12 O2 Si



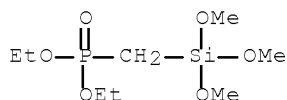
IT 827615-75-8P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(production of hydrolyzable phosphorus-containing alkoxysilanes)

RN 827615-75-8 CAPLUS

CN Phosphonic acid, P-[(trimethoxysilyl)methyl]-, diethyl ester (CA INDEX NAME)



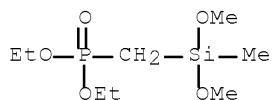
IT 827615-73-6P 827615-74-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production of hydrolyzable phosphorus-containing alkoxy silanes)

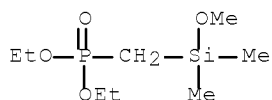
RN 827615-73-6 CAPLUS

CN Phosphonic acid, P-[(dimethoxymethylsilyl)methyl]-, diethyl ester (CA INDEX NAME)



RN 827615-74-7 CAPLUS

CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester (9CI) (CA INDEX NAME)



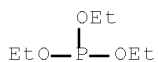
IT 122-52-1, Triethyl phosphite 2212-11-5 5926-26-1
18143-33-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(production of hydrolyzable phosphorus-containing alkoxy silanes)

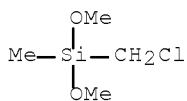
RN 122-52-1 CAPLUS

CN Phosphorous acid, triethyl ester (CA INDEX NAME)



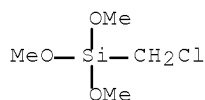
RN 2212-11-5 CAPLUS

CN Silane, (chloromethyl)dimethoxymethyl- (CA INDEX NAME)

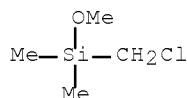


RN 5926-26-1 CAPLUS

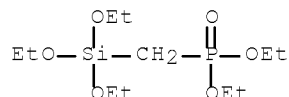
CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



RN 18143-33-4 CAPLUS
CN Silane, (chloromethyl)methoxydimethyl- (CA INDEX NAME)

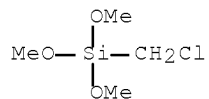


L12 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1976:17471 CAPLUS Full-text
DOCUMENT NUMBER: 84:17471
ORIGINAL REFERENCE NO.: 84:2903a,2906a
TITLE: Alkoxysilanes. XXV. (Iodoalkyl)trialkoxysilanes
AUTHOR(S): Voronkov, M. G.; D'yakov, V. M.; Lukina, Yu. A.;
Samsonova, G. A.; Kudyakov, N. M.
CORPORATE SOURCE: USSR
SOURCE: Zhurnal Obshchei Khimii (1975), 45(9), 2010-13
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
SO Zhurnal Obshchei Khimii (1975), 45(9), 2010-13
CODEN: ZOKHA4; ISSN: 0044-460X
GI For diagram(s), see printed CA Issue.
AB Silanes I(CH₂)_nSi(OR)₃ I (R = Me, Et; n = 1-3) were prepared by treating
Cl(CH₂)_nSi(OR)₃ with NaI. Heating I with (HOCH₂CH₂)₃N in KOH-ClPh gave II.
Arbuzov reaction of I with (R₁O)₃P (R₁ = alkyl) gave (R₁O)₂P(O)(CH₂)_nSi(OR)₃.
IT 1762-10-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 1762-10-3 CAPLUS
CN Phosphonic acid, P-[(triethoxysilyl)methyl]-, diethyl ester (CA INDEX
NAME)



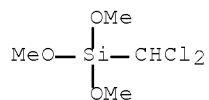
IT 5926-26-1 5926-27-2 15267-95-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with potassium iodide)
RN 5926-26-1 CAPLUS

CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



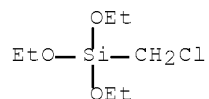
RN 5926-27-2 CAPLUS

CN Silane, (dichloromethyl)trimethoxy- (CA INDEX NAME)



RN 15267-95-5 CAPLUS

CN Silane, (chloromethyl)triethoxy- (CA INDEX NAME)

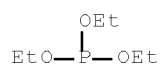


IT 122-52-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with triethoxy(iodomethyl)silane)

RN 122-52-1 CAPLUS

CN Phosphorous acid, triethyl ester (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 19:38:35 ON 07 DEC 2008)

FILE 'REGISTRY' ENTERED AT 19:38:44 ON 07 DEC 2008

L1 STRUCTURE UPLOADED

L2 40861 S L1 SSS FULL

L3 STRUCTURE UPLOADED

L4 423 S L3 SSS FULL

L5 STRUCTURE UPLOADED
L6 24 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:40:22 ON 07 DEC 2008

L7 62589 S L2
L8 613 S L4
L9 26 S L6
L10 0 S L7 (L) L8
L11 16 S L7 AND L8
L12 6 S L11 AND L9

=> s silicon# (w) (polymer or oil or elastomer or fluid or rubber) or polysiloxane
or polyorganosiloxane or organopolysiloxane

1018469 SILICON#
1230888 POLYMER
977392 POLYMERS
1645438 POLYMER
 (POLYMER OR POLYMERS)
848685 OIL
407091 OILS
960795 OIL
 (OIL OR OILS)
48418 ELASTOMER
36267 ELASTOMERS
66986 ELASTOMER
 (ELASTOMER OR ELASTOMERS)
488355 FLUID
201798 FLUIDS
587146 FLUID
 (FLUID OR FLUIDS)
390238 RUBBER
164034 RUBBERS
478043 RUBBER
 (RUBBER OR RUBBERS)
59193 SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID OR RUBBER)
36957 POLYSILOXANE
87269 POLYSILOXANES
96939 POLYSILOXANE
 (POLYSILOXANE OR POLYSILOXANES)
2404 POLYORGANOSILOXANE
1574 POLYORGANOSILOXANES
3414 POLYORGANOSILOXANE
 (POLYORGANOSILOXANE OR POLYORGANOSILOXANES)
4228 ORGANOPOLYSILOXANE
2715 ORGANOPOLYSILOXANES
5895 ORGANOPOLYSILOXANE
 (ORGANOPOLYSILOXANE OR ORGANOPOLYSILOXANES)
L13 144247 SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID OR RUBBER)
 OR POLYSILOXANE OR POLYORGANOSILOXANE OR ORGANOPOLYSILOXANE

=> s polydiorganosiloxane or diorganopolysiloxane or poly (w) oxy (w)
dimethylsilylene

431 POLYDIORGANOSILOXANE
226 POLYDIORGANOSILOXANES
606 POLYDIORGANOSILOXANE
 (POLYDIORGANOSILOXANE OR POLYDIORGANOSILOXANES)
478 DIORGANOPOLYSILOXANE
335 DIORGANOPOLYSILOXANES
760 DIORGANOPOLYSILOXANE
 (DIORGANOPOLYSILOXANE OR DIORGANOPOLYSILOXANES)

```

756764 POLY
      2 POLIES
756765 POLY
      (POLY OR POLIES)
71389 OXY
      13 OXIES
71401 OXY
      (OXY OR OXIES)
3984 DIMETHYLSILYLENE
      11 DIMETHYLSILYLENES
3986 DIMETHYLSILYLENE
      (DIMETHYLSILYLENE OR DIMETHYLSILYLENES)
2585 POLY (W) OXY (W) DIMETHYLSILYLENE
L14    3923 POLYDIORGANOSILOXANE OR DIORGANOPOLYSILOXANE OR POLY (W) OXY
      (W) DIMETHYLSILYLENE

```

=> s polyoxydimethylsilylene or PDMS or polydimethylsiloxane or poly (w)
dimethylsiloxane

```

      8 POLYOXYDIMETHYLSILYLENE
9583 PDMS
17185 POLYDIMETHYLSILOXANE
      1075 POLYDIMETHYLSILOXANES
17688 POLYDIMETHYLSILOXANE
      (POLYDIMETHYLSILOXANE OR POLYDIMETHYLSILOXANES)
756764 POLY
      2 POLIES
756765 POLY
      (POLY OR POLIES)
14561 DIMETHYLSILOXANE
      1445 DIMETHYLSILOXANES
15270 DIMETHYLSILOXANE
      (DIMETHYLSILOXANE OR DIMETHYLSILOXANES)
9566 POLY (W) DIMETHYLSILOXANE
L15    27943 POLYOXYDIMETHYLSILYLENE OR PDMS OR POLYDIMETHYLSILOXANE OR POLY
      (W) DIMETHYLSILOXANE

```

=> d his

(FILE 'HOME' ENTERED AT 19:38:35 ON 07 DEC 2008)

FILE 'REGISTRY' ENTERED AT 19:38:44 ON 07 DEC 2008

```

L1      STRUCTURE UPLOADED
L2      40861 S L1 SSS FULL
L3      STRUCTURE UPLOADED
L4      423 S L3 SSS FULL
L5      STRUCTURE UPLOADED
L6      24 S L5 SSS FULL

```

FILE 'CAPLUS' ENTERED AT 19:40:22 ON 07 DEC 2008

```

L7      62589 S L2
L8      613 S L4
L9      26 S L6
L10     0 S L7 (L) L8
L11     16 S L7 AND L8
L12     6 S L11 AND L9
L13     144247 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID OR RUBBER)
L14     3923 S POLYDIORGANOSILOXANE OR DIORGANOPOLYSILOXANE OR POLY (W) OXY
L15     27943 S POLYOXYDIMETHYLSILYLENE OR PDMS OR POLYDIMETHYLSILOXANE OR PO

```

=> s L13 or L14 or L15

L16 157652 L13 OR L14 OR L15

=> s phosphonate

27023 PHOSPHONATE

10736 PHOSPHONATES

L17 31141 PHOSPHONATE

(PHOSPHONATE OR PHOSPHONATES)

=> s L16 (L) L17

L18 103 L16 (L) L17

=> s his

L19 71773 HIS

=> d his

(FILE 'HOME' ENTERED AT 19:38:35 ON 07 DEC 2008)

FILE 'REGISTRY' ENTERED AT 19:38:44 ON 07 DEC 2008

L1 STRUCTURE UPLOADED

L2 40861 S L1 SSS FULL

L3 STRUCTURE UPLOADED

L4 423 S L3 SSS FULL

L5 STRUCTURE UPLOADED

L6 24 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 19:40:22 ON 07 DEC 2008

L7 62589 S L2

L8 613 S L4

L9 26 S L6

L10 0 S L7 (L) L8

L11 16 S L7 AND L8

L12 6 S L11 AND L9

L13 144247 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID OR RUBBER)

L14 3923 S POLYDIORGANOSILOXANE OR DIORGANOPOLYSILOXANE OR POLY (W) OXY

L15 27943 S POLYOXYDIMETHYLSILYLENE OR PDMS OR POLYDIMETHYLSILOXANE OR PO

L16 157652 S L13 OR L14 OR L15

L17 31141 S PHOSPHONATE

L18 103 S L16 (L) L17

L19 71773 S HIS

=> s L12 and L18

L20 3 L12 AND L18

=> d 1-3 ibib so abs hitstr

L20 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:273682 CAPLUS Full-text

DOCUMENT NUMBER: 144:333109

TITLE: Hydrophobic treatment of substrates with
phosphonate-modified polysiloxanes

INVENTOR(S): Sandmeyer, Frank; Bockholt, Andreas; Gollwitzer,
Leonhard

PATENT ASSIGNEE(S): Wacker Chemie A.-G., Germany

SOURCE: Ger. Offen., 9 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102005046704	A1	20060323	DE 2005-102005046704	20050929

PRIORITY APPLN. INFO.:
DE 2005-102005046704 20050929

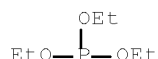
SO Ger. Offen., 9 pp.
CODEN: GWXXBX

AB Phosphonate-modified polysiloxanes prepared by reacting phosphonate-group-containing silanes alone or with alkoxysilanes and water are useful as hydrophobizing agents for cements and concrete. Thus, diethylphosphonatomethyltrimethoxysilane-methyl(dimethoxy)(aminopropylaminoethyl)silane copolymer prepared by cohydrolysis of the two monomers was used coating (brushing) onto cement fibers with d. 200 g/m2 providing the surfaces with water-repellent properties.

IT 122-52-1, Triethylphosphite 5926-26-1,
Chloromethyltrimethoxysilane
RL: RCT (Reactant); RACT (Reactant or reagent)
(phosphonate-modified polysiloxane precursor;
phosphonate-modified polysiloxanes prepared by reacting
of phosphonate-group-containing silanes alone or with
alkoxysilanes and water used as hydrophobizing agents for cements and
concrete)

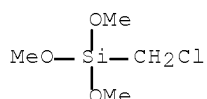
RN 122-52-1 CAPLUS

CN Phosphorous acid, triethyl ester (CA INDEX NAME)



RN 5926-26-1 CAPLUS

CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



IT 880128-19-8P 880128-21-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(phosphonate-modified polysiloxanes prepared by
reacting of phosphonate-group-containing silanes alone or with
alkoxysilanes and water used as hydrophobizing agents for cements and
concrete)

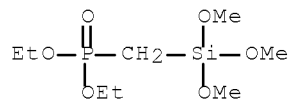
RN 880128-19-8 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with
trimethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

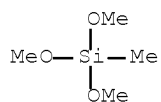
CMF C8 H21 O6 P Si



CM 2

CRN 1185-55-3

CMF C4 H12 O3 Si



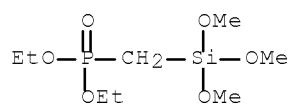
RN 880128-21-2 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with trimethoxysilane (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

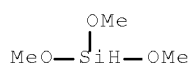
CMF C8 H21 O6 P Si



CM 2

CRN 2487-90-3

CMF C3 H10 O3 Si



IT 880128-20-1F

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

(Reactant or reagent)

(phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes alone or with alkoxysilanes and water used as hydrophobizing agents for cements and concrete)

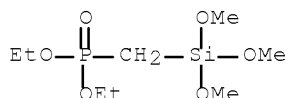
RN 880128-20-1 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with N-[2-(dimethoxymethylsilyl)ethyl]-1,3-propanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

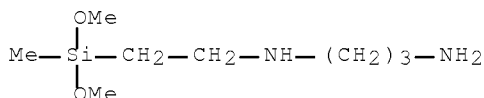
CMF C8 H21 O6 P Si



CM 2

CRN 160888-91-5

CMF C8 H22 N2 O2 Si



L20 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:451447 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 142:482806

TITLE: Production of organosiloxanes modified by phosphonate ester groups

INVENTOR(S): Schaefer, Oliver; Luckas, Hans-Joachim

PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie G.m.b.H., Germany

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2005047368	A1	20050526	WO 2004-EP12201	20041028
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10351803 A1 20050609 DE 2003-10351803 20031106
 EP 1678240 A1 20060712 EP 2004-790971 20041028

R: BE, DE, FR, GB, NL

CN 1875053 A 20061206 CN 2004-80032721 20041028
 JP 2007512395 T 20070517 JP 2006-538708 20041028
 US 20070167597 A1 20070719 US 2006-595701 20060505

PRIORITY APPLN. INFO.:

DE 2003-10351803 A 20031106
 WO 2004-EP12201 W 20041028

SO PCT Int. Appl., 25 pp.
 CODEN: PIXXD2

AB The title polymers, which can be prepared readily using com. available compds., are prepared by the reaction of phosphonate esters bearing silyl groups with siloxanes. Adding 0.3 mol (chloromethyl)dimethoxymethylsilane over 3 h to 0.6 mol P(OEt)₃ at 140° with strong stirring, heating at 170° for 30 min, and distilling excess P(OEt)₃ in vacuo gave 58.6 g di-Et [(dimethoxymethylsilyl)methyl]phosphonite (I). Adding 220 g polydimethylsiloxane diol (mol. weight 1100) over 10 min to 26.1 g I and 0.5% iso-Pr phosphate (catalyst) at 60° with strong stirring and heating at 80° for 2 h gave 239 g phosphonate group-containing block copolymer with number-average mol. weight 2500.

IT 852213-16-2P 852213-17-3P 852213-18-4P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (actual and assumed monomers; production of organosiloxanes modified by phosphonate ester groups)

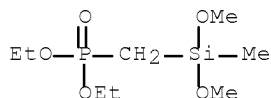
RN 852213-16-2 CAPLUS

CN Phosphonic acid, [(dimethoxymethylsilyl)methyl]-, diethyl ester, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)

CM 1

CRN 827615-73-6

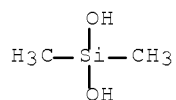
CMF C8 H21 O5 P Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



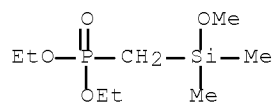
RN 852213-17-3 CAPLUS

CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)

CM 1

CRN 827615-74-7

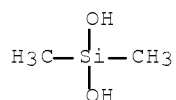
CMF C8 H21 O4 P Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



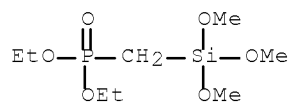
RN 852213-18-4 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

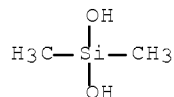
CMF C8 H21 O6 P Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si

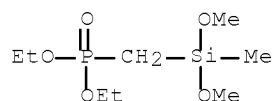


IT 827615-73-6P 827615-74-7P 827615-75-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation)

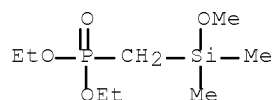
RN 827615-73-6 CAPLUS

CN Phosphonic acid, P-[(dimethoxymethylsilyl)methyl]-, diethyl ester (CA
INDEX NAME)



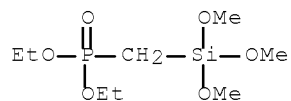
RN 827615-74-7 CAPLUS

CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester (9CI) (CA
INDEX NAME)



RN 827615-75-8 CAPLUS

CN Phosphonic acid, P-[(trimethoxysilyl)methyl]-, diethyl ester (CA INDEX
NAME)

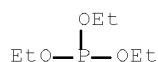


IT 122-52-1, Triethyl phosphite 2212-11-5,
(Chloromethyl)dimethoxymethylsilane 5926-26-1,

(Chloromethyl)trimethoxysilane 18143-33-4,
 (Chloromethyl)methoxydimethylsilane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of tri-Et phosphite with (chloromethyl)silanes)

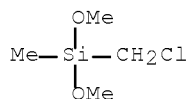
RN 122-52-1 CAPLUS

CN Phosphorous acid, triethyl ester (CA INDEX NAME)



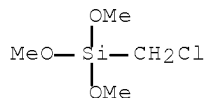
RN 2212-11-5 CAPLUS

CN Silane, (chloromethyl)dimethoxymethyl- (CA INDEX NAME)



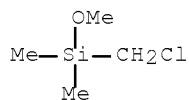
RN 5926-26-1 CAPLUS

CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



RN 18143-33-4 CAPLUS

CN Silane, (chloromethyl)methoxydimethyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:58269 CAPLUS Full-text

DOCUMENT NUMBER: 142:156528

TITLE: Method for producing phosphonate-modified silicones.

INVENTOR(S): Schaefer, Oliver; Luckas, Hans-Joachim; Rachl, Sandra

PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie GmbH,

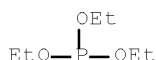
SOURCE: Germany
PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005005519	A1	20050120	WO 2004-EP7173	20040701
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10331288	A1	20050217	DE 2003-10331288	20030710
EP 1644430	A1	20060412	EP 2004-740538	20040701
EP 1644430	B1	20080827		
R: BE, DE, FR, GB, IT				
CN 1823117	A	20060823	CN 2004-80019805	20040701
US 20070049718	A1	20070301	US 2006-595035	20060109
PRIORITY APPLN. INFO.:			DE 2003-10331288	A 20030710
			WO 2004-EP7173	W 20040701

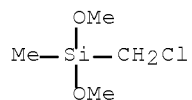
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2

AB Phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes alone or with alkoxysilanes and water are useful as additives (especially as antistatic additives) in elastomeres (especially in siloxane elastomers). Thus, a polymer prepared by hydrolytic polymerization of a mixture 12 g of dimethyldimethoxysilane and 25.6 g of di-Et ester of [(dimethoxymethylsilyl)methyl]phosphonic acid with 14.5 g of water and 3 weight% of HCl at 80° and 100 mbar (44 weight% of a cyclic part having mol. weight 650 and 56 weight% of a linear part having mol. weight 6,200) is useful as an antistatic additive in a mixture with a moisture-crosslinkable silicone (Elastosil).

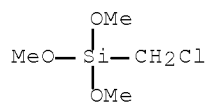
IT 122-52-1, Triethylphosphite 2212-11-5,
Chloromethyldimethoxymethylsilane 5926-26-1,
Chloromethyltrimethoxysilane 15267-95-5,
Chloromethyltriethoxysilane 18143-33-4,
Chloromethyldimethylmethoxysilane
RL: RCT (Reactant); RACT (Reactant or reagent)
(phosphonate-group-containing silane precursor;
phosphonate-modified polysiloxanes prepared by reacting
of phosphonate-group-containing silanes with alkoxysilanes useful
as antistatic additives in elastomeres (especially in siloxane elastomers))
RN 122-52-1 CAPLUS
CN Phosphorous acid, triethyl ester (CA INDEX NAME)



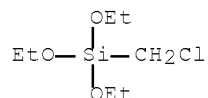
RN 2212-11-5 CAPLUS
CN Silane, (chloromethyl)dimethoxymethyl- (CA INDEX NAME)



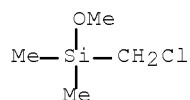
RN 5926-26-1 CAPLUS
CN Silane, (chloromethyl)trimethoxy- (CA INDEX NAME)



RN 15267-95-5 CAPLUS
CN Silane, (chloromethyl)triethoxy- (CA INDEX NAME)

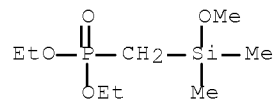


RN 18143-33-4 CAPLUS
CN Silane, (chloromethyl)methoxydimethyl- (CA INDEX NAME)



IT 827615-74-7DP, reaction products with DimethylSilanediol and
alkoxysilanes 827615-76-9P 827622-42-4P
RL: IMF (Industrial manufacture); PREP (Preparation)
(phosphonate-modified polysiloxanes prepared by
reacting of phosphonate-group-containing silanes with
alkoxysilanes useful as antistatic additives in elastomeres (especially in
siloxane elastomers))
RN 827615-74-7 CAPLUS
CN Phosphonic acid, [(methoxydimethylsilyl)methyl]-, diethyl ester (9CI) (CA

INDEX NAME)



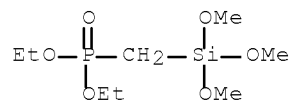
RN 827615-76-9 CAPLUS

CN Phosphonic acid, [(trimethoxysilyl)methyl]-, diethyl ester, polymer with dimethoxydimethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 827615-75-8

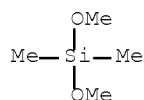
CMF C8 H21 O6 P Si



CM 2

CRN 1112-39-6

CMF C4 H12 O2 Si



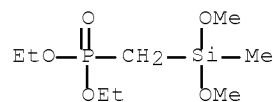
RN 827622-42-4 CAPLUS

CN Phosphonic acid, [(dimethoxymethylsilyl)methyl]-, diethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 827615-73-6

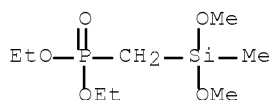
CMF C8 H21 O5 P Si



IT 827622-45-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (phosphonate-modified polysiloxanes prepared by reacting of phosphonate-group-containing silanes with alkoxy silanes useful as antistatic additives in elastomeres (especially in siloxane elastomers))
 RN 827622-45-7 CAPLUS
 CN Phosphonic acid, [(dimethoxymethylsilyl)methyl]-, diethyl ester, polymer with dimethoxydimethylsilane (9CI) (CA INDEX NAME)

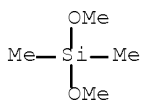
CM 1

CRN 827615-73-6
 CMF C8 H21 O5 P Si



CM 2

CRN 1112-39-6
 CMF C4 H12 O2 Si



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y